

# CHAPTER 1

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## Introduction

### 1.1 Proposed Program

The California Department of Fish and Game (CDFG) and the Shasta Valley Resource Conservation District (SVRCD) are proposing a Watershed-wide Permitting Program for the Shasta River watershed (Program). The purpose of the Program is to provide a streamlined and comprehensive permitting framework to enable farmers and ranchers throughout the Shasta River watershed (Program Area) to continue their routine agricultural activities while complying with Fish and Game Code, § 1600 *et seq.* and the California Endangered Species Act (CESA) (Fish and Game Code, § 2050 *et seq.*).

The agricultural water diversions, activities related to the diversions, and the other activities the Program covers, referred to in the Program as the “Covered Activities,”<sup>1</sup> are subject to Fish and Game Code, § 1600 *et seq.* because they substantially divert or obstruct the natural flow of rivers, streams, or lakes in the Program Area; substantially change the beds, channels, or banks of rivers, streams, or lakes in the Program Area; and/or use material from the beds, channels, or banks of rivers, streams, or lakes in the Program Area. As discussed in greater detail below and in Chapter 2, Program participants will comply with Fish and Game Code, § 1600 *et seq.* by obtaining streambed alteration agreements (SAA).

CESA prohibits take<sup>2</sup> of endangered, threatened, and candidate species unless the take is authorized by CDFG. The Covered Activities are subject to CESA because they could result in take of coho salmon (*Oncorhynchus kisutch*). Coho salmon that occur in the Program Area are listed as threatened under CESA. As discussed in greater detail below and in Chapter 2 (Project Description<sup>3</sup>), Program participants will comply with CESA by obtaining incidental take authorization from CDFG pursuant to Fish and Game Code, § 2081(b) and (c).

Farmers and ranchers who are eligible to participate in the Program are referred to as “Agricultural Operators.” An “Agricultural Operator” is defined in the Program as any natural person or any partnership, corporation, limited liability company, trust, or other type of association, or any public agency, as defined in CEQA *Guidelines*, § 15379, who diverts water from a stream by means of an active diversion in the Program Area for an agricultural purpose, or

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<sup>1</sup> Covered Activities are described fully in Chapter 2, Project Description.

<sup>2</sup> “‘Take’ means hunt, pursue, catch, capture or kill, or attempt to hunt, pursue, catch, capture, or kill.” (Fish and Game Code, 86.)

<sup>3</sup> For purposes of this Draft EIR the “Program” is the “Project” being analyzed pursuant to CEQA.

is involved in an agricultural operation on property in the Program Area through which or adjacent to which a stream flows. “Active diversion” is defined as a surface water diversion that has been operated at least one out of the last five years.

SVRCD and the Department of Water Resources (DWR) will also participate in the Program. SVRCD will participate because, as part of the Program, it will be implementing coho salmon restoration projects that are subject to Fish and Game Code, § 1600 *et seq.* and those projects could result in take of coho salmon in the Program Area. DWR will participate in the Program because it currently provides watermastering service in the Program Area. Under the Program, the watermaster in some instances will need to take certain actions to avoid or minimize the take of coho salmon as it relates to operating water diversions and managing water in the Program Area.

The Program consists of:

- **Watershed-wide Streambed Alteration Agreement Program (SAA Program)**

The SAA component of the Program will consist of separate SAAs issued by CDFG to SVRCD and each Agricultural Operator. CDFG will include in each SAA the applicable terms and conditions from the “Master List of Terms and Conditions” (MLTC) developed as part of the Program. The terms and conditions are intended to protect existing fish and wildlife resources that the Covered Activity or Activities could substantially adversely affect. The MLTC will be an attachment to a Memorandum of Understanding (MOU) between CDFG and SVRCD that describes their roles and responsibilities in regards to the SAA component of the Program.

- **Watershed-wide Incidental Take Authorization for Coho Salmon**

CDFG will issue an “incidental take permit” (ITP) to SVRCD in accordance with Fish and Game Code, § 2081(b) and (c) to provide it take authorization in the course of implementing coho salmon restoration projects that are part of the Program. The restoration projects are intended to implement certain tasks identified in the Recovery Strategy for California Coho Salmon the Fish and Game Commission adopted in 2004 (Coho Recovery Strategy) and at the same time fully mitigate any take of coho salmon that occurs incidental to conducting a Covered Activity, as CESA requires. CDFG will issue separate take authorization to the Agricultural Operators who enroll in the Program and DWR in the form of a “sub-permit.” The Program uses the term “sub-permit” because each will be based on SVRCD’s ITP, but still enforceable as a “stand alone” permit. The separate obligations SVRCD will have under its ITP and those the “sub-permittees” will have under their sub-permits are discussed in Chapter 2, Project Description.

- **Monitoring Program**

The ITP will require SVRCD to establish a program to determine whether or not Agricultural Operators are fulfilling the terms and conditions required by their sub-permits, and to determine the effectiveness of the conditions in the ITP and sub-permits to avoid, minimize, and fully mitigate the incidental take of coho salmon in the Program Area.

Each of these components is described in greater detail in Chapter 2, Project Description.

CDFG and the Siskiyou Resource Conservation District have developed a watershed-wide permitting program for the Scott River watershed similar to the Program for the Shasta River watershed. CDFG is conducting a separate environmental review of that Program under CEQA. However, the potential for cumulative effects of the two programs combined is considered in Chapter 4.

## 1.2 Environmental Review of the Program

### 1.2.1 Lead Agency

CDFG is the public agency with the principal responsibility for approving and administering the Program, and therefore as defined in CEQA and the *CEQA Guidelines*,<sup>4</sup> is the “lead agency” under CEQA for the purpose of preparing the Environmental Impact Report (EIR) for the Program (Public Resources Code, § 21067; *CEQA Guidelines*, § 15367). CDFG has identified the North Coast Regional Water Quality Control Board,<sup>5</sup> the State Water Resources Control Board (SWRCB), and the Office of Historic Preservation as potential “responsible agencies” under CEQA. A responsible agency is a state, local, or regional agency, or board or commission other than the lead agency that has discretionary approval power over a project for which the lead agency is preparing or has prepared an environmental document (Public Resources Code, § 21069; *CEQA Guidelines*, § 15381).

The Covered Activities could affect the beds of navigable waters and other “state owned ‘sovereign’ land,” which are within the jurisdiction of the State Lands Commission (*CEQA Guidelines*, § 15386(b)). As a result, CDFG has identified the State Lands Commission as a “trustee agency” for the Program. A trustee agency is a state agency that has jurisdiction over natural resources held in trust for the people of the state that could be affected by a project or program (Public Resources Code, § 21070; *CEQA Guidelines*, § 15386).

Federal agencies that might have discretionary approval power over the Covered Activities include the U.S. Army Corps of Engineers under the Clean Water Act and the National Marine Fisheries Service and the U.S. Fish and Wildlife Service under the federal Endangered Species Act. However, if these or any other federal agencies must approve a Covered Activity, they will not rely on the EIR for the Program. Instead, they will need to comply with the National Environmental Policy Act (NEPA) either as the lead agency, in which case it will be responsible for preparing its own environmental document, or as a cooperating agency, in which case it will consider the NEPA lead agency’s environmental document in approving the Covered Activity.

<sup>4</sup> The *CEQA Guidelines* are the regulations that implement CEQA. The *CEQA Guidelines* are in the California Code of Regulations, title 14, § 15000 *et seq.*

<sup>5</sup> NCRWQCB informed CDFG that it may rely on this document as a responsible agency in issuing any required permits for Covered Activities that are required as part of the Shasta River Total Maximum Daily Loads discussed in Chapter 3.2. According to NCRWQCB, restoration activities that discharge waste to waters of the state will require water quality certifications under Clean Water Act section 401 and/or Porter-Cologne Water Quality Control Act waste discharge requirements, both of which are discretionary actions subject to CEQA. If possible, NCRWQCB staff intends to propose a general water quality certification/waste discharge requirements for restoration activities to further streamline and coordinate permitting in the Shasta River watershed (Leland, 2008).

## 1.2.2 Need for Environmental Review

The overall intent of the Program is to reduce the environmental impacts of historic, ongoing agricultural water diversions and activities related to those diversions, and coho salmon restoration projects in the Program Area. Nonetheless, CDFG determined it was necessary to prepare this Draft EIR for the Program to comply with CEQA because 1) establishing and implementing the Program by issuing SAAs, the ITP, and sub-permits for the Covered Activities constitute discretionary approvals by CDFG; and 2) based on the Initial Study for the Program, CDFG determined the Covered Activities have the potential to cause significant effects on the environment, as defined in the CEQA *Guidelines* (CEQA *Guidelines*, § 15382).

The four purposes of this Draft EIR are:

1. To describe the Program;
2. To determine whether the Program has the potential to cause significant adverse effects on the physical environment;
3. Where such effects are identified, to develop feasible mitigation measures to reduce or eliminate the environmental impacts;
4. To consider feasible alternatives to the Program that could attain most of the Program's objectives, while reducing its environmental impacts.

## 1.2.3 Scope of the Draft EIR

This Draft EIR analyzes the Program by describing the Program and the Covered Activities; the environmental setting where the Covered Activities will occur; an evaluation of the effects the Covered Activities could have on the physical environment; for those effects that CDFG determines could be significant, a description of any mitigation measures that can be incorporated into the Covered Activities through the MLTC and ITP to reduce those effects to less than significant; and a description of a reasonable range of potentially feasible alternatives to the Program. If CDFG approves the Program, any mitigation measures identified in this Draft EIR that are not in MLTC and ITP will be added to them.

### Program EIR

This Draft EIR is a “program EIR,” i.e., an EIR for the Program at a project-specific level. As described in CEQA *Guidelines*, § 15168(a), a program EIR is:

“An EIR . . . prepared on a series of actions that can be characterized as one large project and are related either:

- (1) Geographically;
- (2) As logical parts in the chain of contemplated actions;

- (3) In connection with issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program; or
- (4) As individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects which can be mitigated in similar ways.”

A program EIR is appropriate in this case because the Program will comprise a series of actions that can be characterized as one large project (i.e., the issuance by CDFG of SAAs to SVRCD and Agricultural Operators and take authorization to SVRCD, Agricultural Operators, and DWR for only those activities the Program covers) that are related geographically (i.e., within the Shasta River watershed), carried out under the same authorizing statutory authority (i.e., Fish and Game Code, § 1600 *et seq.* and CESA), and have generally similar environmental impacts that can be mitigated in similar ways.

Before CDFG issues a SAA and sub-permit, it will 1) confirm that the activity is a Covered Activity, and, if so, 2) determine in light of the project-specific information whether the impacts of the Covered Activity are adequately addressed in the EIR for the Program and its related mitigation measures. CDFG will prepare subsequent or supplemental CEQA analysis if it determines that the Covered Activity will result in new significant or more substantially severe impacts than addressed in the EIR for the Program.

### ***Effects Deemed Less Than Significant in the Initial Study***

On October 20, 2006, CDFG published its Initial Study for the Program, a copy of which is included as Appendix D. Pursuant to CEQA *Guidelines*, § 15063(c), the Initial Study was used to focus this Draft EIR on the effects of the Program that CDFG determined could be significant, and to identify the effects of the Program determined to be less than significant or not significant. The Initial Study identifies the effects of the Program as less than significant (at both a project and cumulative level) on the environmental factors listed below. As a result, these factors are not further analyzed in this Draft EIR.

- Aesthetics
- Air Quality
- Geology, Soils, and Seismicity<sup>6</sup>
- Mineral Resources
- Noise
- Population and Housing
- Recreation
- Transportation and Traffic

<sup>6</sup> Geomorphic effects are considered in this Draft EIR with Hydrology and Water Quality.

## **Response to Comments**

In comments on CDFG's Notice of Preparation for this Draft EIR, and in comments received during the scoping meetings CDFG held in October 2006 (Appendix E), several individuals suggested that the Program would be inadequate to restore coho salmon and other anadromous fish in the Shasta River watershed. In response, CDFG notes the following:

- The Program is not intended to substitute for the Coho Recovery Strategy, nor is it intended to be a vehicle for implementation of the full Coho Recovery Strategy. Overall, however, the Program is consistent with the "programmatic implementation framework" called for in the Coho Recovery Strategy. The restoration activities included as mitigation in the ITP are also consistent with elements of the Coho Recovery Strategy. As described in the Coho Recovery Strategy, the effort to restore coho salmon in California must go well beyond the mitigation measures that will be implemented as part of the Program.
- A primary purpose of the Program is to enable Agricultural Operators to continue routine farming and ranching activities in the Program Area and SVRCD's restoration project implementation, while avoiding, minimizing, and mitigating for take of coho salmon that might occur incidental to those activities, in accordance with Fish and Game Code, § 1600 *et seq.* and CESA.
- Because coho salmon is the only listed salmonid species in the Shasta River watershed, CDFG does not have the authority to issue incidental take authorization for Chinook salmon (*O. tshawytscha*) or steelhead (*O. mykiss*). Many of the minimization, avoidance, and mitigation measures included in the ITP and many of the conditions that will be included in the SAAs will, however, also serve to benefit other anadromous fish species and aquatic and riparian resources. Furthermore, pursuant to CEQA, CDFG must examine the potential impacts of the Program on both listed and non-listed fish species. Hence, this Draft EIR also examines such impacts on fish species in the Program Area other than coho salmon (see Chapter 3.3, Biological Resources: Fisheries and Aquatic Habitat).
- The Program does not in any way "challenge" existing legal water rights. CDFG is authorized to impose conditions on water diversions and other Covered Activities to protect fish and wildlife resources that could affect the exercise of such water rights under Fish and Game Code, § 1600 *et seq.*, CESA, and other state laws, but it does not have the authority to revoke those rights. That authority rests with the SWRCB. Therefore, the revocation of an existing legal water right by CDFG would not constitute a feasible mitigation measure, and therefore this Draft EIR does not include such a measure.
- The overall condition of the Shasta River's anadromous fishery is reviewed in Chapter 3.3, Biological Resources: Fisheries and Aquatic Habitat. Conditions in the Klamath River are briefly described in the discussion of cumulative impacts in Chapter 4.

## **1.2.4 Comments on the Draft EIR**

This Draft EIR will be circulated for a period of 60 days, during which time all interested parties will have the opportunity to review the document and provide CDFG with comments on its contents and analysis. During the 60-day period, CDFG will hold a public hearing to receive written and verbal comments.

Following the close of the 60-day comment period, CDFG will respond to all comments received within the 60-day period, and publish the responses, along with any revisions to this Draft EIR, in a final Environmental Impact Report (Final EIR). At that time, the Regional Manager of CDFG's Northern Region will decide whether to certify (i.e., adopt) the Final EIR. If it is certified, CDFG will take one of the following two actions:

1. Approve the Program as proposed, with mitigation measures identified in the Final EIR incorporated into the Program; or
2. Disapprove the Program.

### 1.3 Documents Attached and Incorporated by Reference in the Draft EIR

An EIR may “incorporate by reference all or portions of another document which is a matter of public record or is generally available to the public” (CEQA *Guidelines*, § 15150). Portions of several documents relevant to the environmental analysis for the Program have been summarized in various chapters throughout this Draft EIR. The proposed SAA MOU and attached MLTC and ITP are attached to this Draft EIR as Appendices A and B, respectively. In addition, the following documents are essential to understanding the background, environmental setting, and regulatory context of the Program, and therefore are incorporated herein by reference:<sup>7</sup>

- CDFG, Initial Study for the Shasta River Watershed-wide Permitting Program. October, 2006 (attached as Appendix D). This document was the first step in the CEQA process for the Program. The Initial Study was used to identify those environmental factors that could be adversely affected by the Program. Those environmental factors that were found not to be potentially affected by the Program are not further considered in this Draft EIR.
- CDFG Report to the California Fish and Game Commission, *Recovery Strategy for California Coho Salmon*, February 2004. This document describes historic and current coho salmon population trends, examines the causes for the decline of the species, and lays out a strategy for recovering the species, including a pilot program that addresses agricultural activities the Shasta and Scott River watersheds. The Recovery Strategy is further reviewed in Chapter 3.3, Biological Resources: Fisheries and Aquatic Habitat.
- North Coast Regional Water Quality Control Board, Staff Report for the Action Plan for the Shasta River Watershed Temperature and Dissolved Oxygen Total Maximum Daily Loads (TMDL), June 2006. This document lays out a plan for reduction of temperature and dissolved oxygen impairment of the Shasta River, in order to achieve water quality standards. It is further reviewed in Chapter 3.2, Geomorphology, Hydrology, and Water Quality. The full document is available at [http://www.swrcb.ca.gov/northcoast/water\\_issues/programs/tmdls/shasta\\_river/staff\\_report.shtml](http://www.swrcb.ca.gov/northcoast/water_issues/programs/tmdls/shasta_river/staff_report.shtml)

<sup>7</sup> All referenced documents are available at CDFG's Northern Region Office at 601 Locust Street, Redding, California 96001.

- Draft Shasta River TMDL Implementation Workplan, March 2007. This document lays out specific tasks and responsibilities for implementing the Shasta River TMDL. It is further described in Chapter 3.2, Geomorphology, Hydrology, and Water Quality. The full document is at:  
[http://www.swrcb.ca.gov/northcoast/water\\_issues/programs/tmdls/shasta\\_river/070320/070320\\_shasta\\_workplan\\_draft.pdf](http://www.swrcb.ca.gov/northcoast/water_issues/programs/tmdls/shasta_river/070320/070320_shasta_workplan_draft.pdf)
- SVRCD *Incidental Take Permit Application for Coho Salmon (*Oncorhynchus kisutch*)*, March 29, 2005. This document is the formal application by SVRCD for the ITP. It includes SVRCD's analysis of potential impacts on coho salmon of proposed Covered Activities, and proposed avoidance, minimization, and mitigation measures, many of which are incorporated in the draft ITP. It also includes as attachments extensive background information on the Shasta River and its watershed that is further reviewed and incorporated into the setting sections in Chapters 3.2 and 3.3.
- SVRCD SAA Notification, April 1, 2005. This document is the formal application for a Streambed Alteration Agreement, pursuant to Fish and Game Code, § 1602.

## 1.4 Organization of the Draft EIR

The Draft EIR is organized into six chapters, preceded by a Table of Contents and Summary, each of which is described briefly below.

**Summary.** The Draft EIR Summary, prepared in accordance with CEQA *Guidelines*, § 15123, contains an overview of key elements of the Draft EIR. This Summary includes a description of the Program (the full description is found in Chapter 2), as well as a description of Program alternatives as they compare to the Program (the full alternatives analysis is found in Chapter 5). Areas of controversy are also discussed. The Summary concludes with a comprehensive list of environmental impacts and mitigation measures identified in the Draft EIR, indicating the level of significance of each impact before and after mitigation, presented in table format.

**Chapter 1 – Introduction.** The Introduction briefly describes the CDFG permitting and environmental review processes for the Program, identifies the technical documents that are incorporated by reference into the Draft EIR, and describes the organization of the Draft EIR.

**Chapter 2 – Project Description.** The Project Description is prepared pursuant to CEQA *Guidelines*, § 15124, and contains a discussion of the Program attributes through text, figures, and tables. Specifically, Chapter 2 includes an overview of the Program; describes the need for, objectives, and benefits of the Program; describes in general the activities the Program covers (i.e., the Covered Activities); and describes in detail the terms and conditions in the MLTC (i.e., measures necessary to protect fish and wildlife resources) and ITP (i.e., avoidance, minimization, and mitigation measures).

**Chapter 3 – Environmental Setting, Impacts, and Mitigation Measures.** Chapter 3 begins with an introduction followed by seven “sub-chapters” (Chapters 3.1–3.7). The introduction discusses the environmental setting for the Program in broad terms and explains how the Chapter



is organized. Following from the introduction, each sub-chapter includes a more focused discussion of the environmental setting pertinent to the resource the sub-chapter addresses (e.g., Land Use and Agriculture); a description of the criteria used to determine whether a particular impact could be significant; the environmental impacts the Covered Activities could have on the resource; a determination of whether they will be significant based on the significance criteria; and, where the impact is identified as potentially significant, a description of the mitigation measure(s) that will reduce the impact to less than significant. The social and economic effects of the Program are discussed in the context of its potential to induce changes in land use.

**Chapter 4 – Cumulative Effects and Other Required Topics.** Chapter 4 identifies and describes existing environmental statutes and regulations CDFG administers and enforces, as well as activities and programs under the jurisdiction of other agencies that could contribute to significant cumulative impacts. It also indicates the potential for the Program, in combination with other projects in the watershed, to contribute to significant cumulative impacts. This Chapter also discusses the potential the Program could have to induce growth and significant irreversible environmental changes if the Program is implemented.

**Chapter 5 – Alternatives to the Program.** In accordance with *CEQA Guidelines*, § 15126.6, Chapter 5 presents a reasonable range of potentially feasible alternatives designed to attain most of the basic objectives of the Program while avoiding or substantially reducing any potentially significant environmental impacts from the Program. Chapter 5 analyzes three alternatives, including their potential for reducing any adverse impacts associated with the Program, and their ability to meet Program objectives.

**Chapter 6 – Draft EIR Authors, Persons and Organizations Contacted.** Chapter 6 identifies the individuals who were involved in the preparation of the Draft EIR. Persons and organizations contacted in preparation of the Draft EIR are referenced at the end of each Chapter.

**Appendices.** The Draft EIR contains several appendices of technical and procedural materials that are pertinent to the analysis in the Draft EIR. The appendices are listed in the Table of Contents.

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## References

Leland, David, North Coast Regional Water Quality Control Board, Santa Rosa, California, written communication, February 6, 2008.